EDGAR MACIAS México | [+52] 5551915473 | edgarmacias@devcybsec.com

[LinkedIn Profile] | [GitHub Profile] | edgarmacias.com | devcybsec.com

PROFESSIONAL SUMMARY Senior Software Engineer with 8+ years designing scalable, high-concurrency systems at enterprise scale. Expert in Go, NestJS, and AWS infrastructure. Proven ability to architect and execute complex system migrations, modernize legacy platforms, and build security-by-design into core infrastructure. Technical author on Hexagonal Architecture and cloud-native patterns.

TECHNICAL SKILLS

- Languages: Go (Golang), TypeScript/JavaScript (Node.js/NestJS/NextJS), PHP (Symfony), Python (ETL & Security Tooling).
- Security & AppSec: OWASP Top 10, SAST Development, Data Encryption (AES-GCM/RSA), Supply Chain Security (Cosign, SBOM), Container Hardening (Trivy), Rector.
- Infrastructure & Cloud: AWS (ECS, VPC, RDS, S3), Firebase Hosting, Digital Ocean, Docker, Terraform (IaC), Linux, CI/CD Pipelines.
- Databases: PostgreSQL (Advanced Transaction Management), SQL Server, Redis, MongoDB.
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PROFESSIONAL EXPERIENCE

DEVCYBSEC | Founder & Lead Product Security Engineer | 2023 – Present

- Architected and deployed a decentralized security training platform featuring 18 interactive laboratories focused on OWASP Top 10 and API Security.
- Engineered a client-side compute model using Docker, eliminating infrastructure costs while ensuring 100% user environment isolation and horizontal scalability.
- Implemented a Secure Software Supply Chain using GitHub Actions and Cosign to ensure artifact integrity for a global base of developers.

NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (UNAM) | Senior Software Engineer | 2017 – 2025

- High-Concurrency Architecture: Designed and maintained mission-critical enrollment systems handling tens of thousands of concurrent requests during peak academic periods with zero downtime.
- Security by Design: Lead the end-to-end development of an institutional psychological services platform, integrating advanced cryptography and secure data handling for sensitive personal information.
- Migration & Modernization: Engineered a custom Python ETL pipeline to migrate 8+ years of legacy .NET/SQL Server data to PostgreSQL, achieving a 90% success rate and reducing execution time by 60%.

- Infrastructure & DevOps: Orchestrated the containerization of legacy PHP (Symfony) systems using Docker and Rector, establishing modern, testable environments and increasing deployment velocity.
- Quality Engineering: Introduced unit testing (PHPUnit/Jest) for critical rule engines, ensuring deterministic behavior in official academic procedures and reducing regression risks.

SELECTED PROJECTS & PUBLICATIONS

DevCybSec Security Training Platform | devcybsec.com

- Architected and deployed distributed security training platform: NextJS frontend (Firebase Hosting), NestJS REST API (Digital Ocean droplet), Go microservice handling encryption operations.
- Implemented end-to-end security: microservice isolation, encrypted data pipeline, secure API patterns. Demonstrates proficiency in modern distributed architectures at scale.
- Production system serving global developer base with 18 interactive OWASP/API Security laboratories.

Go-Hexagonal-Auth & AWS Deployment | [GitHub: go-hexagonal-auth] | [GitHub: aws_road]

- Developed a production-ready Auth Service in Go following Hexagonal Architecture for maximum decoupling.
- Implemented full AWS Infrastructure (aws_road) demonstrating proficiency in cloud-native deployment patterns.

Mini-SAST Tool | [GitHub: mini-sast]

- Built a custom static analysis tool to detect security flaws and hardcoded secrets using AST parsing.

Technical Author | [dev.to/emp_devcybsec]

- Author of a specialized series on Secure Software Architecture, reaching a global audience of developers.

EDUCATION B.S. in Computer Engineering | National Autonomous University of Mexico (UNAM) | English: B2 (Professional Proficiency)